

REMARKS

The present application was filed on October 23, 2003 with claims 1-37. Claims 1, 17, 29-31 and 37 are the independent claims.

In the final Office Action dated November 27, 2007, the Examiner: (i) rejected claims 1-35 and 37 under 35 U.S.C. §102(e) as being unpatentable over U.S. Patent No. 7,020,697 to Goodman et al. (hereinafter “Goodman”); and (ii) rejected claim 36 under 35 U.S.C. §103(a) as being unpatentable over Goodman in view of U.S. Patent Application Publication No. 2004/0003080 to Huff (hereinafter “Huff”).

With regard to the §102(e) rejection of claims 1-35 and 37, Applicants initially note that MPEP §2131 specifies that a given claim is anticipated “only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference,” citing Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Moreover, MPEP §2131 indicates that the cited reference must show the “identical invention . . . in as complete detail as is contained in the . . . claim,” citing Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). Applicants respectfully traverse the §102(e) rejection on the ground that the Goodman reference fails to teach or suggest each and every limitation of claims 1-35 and 37 as alleged.

Independent claim 1 recites a method of serving data to a plurality of clients in a client-server environment, comprising the steps of: providing a plurality of versions of data in which at least two versions have different overheads associated therewith; assigning individual clients to one of a plurality of quality-of-service classes; and satisfying requests so that a client belonging to a high quality-of-service class is given preferential access to data versions which require higher overheads to serve. Independent claims 17, 29-31 and 37 recite certain similar limitations, as well as other limitations. Advantageously, the claimed invention provides that clients belonging to higher quality of service classes may be given preferential access to higher quality content (i.e., in many cases, higher quality content requires more overhead to serve).

Goodman has absolutely nothing to do with serving data to a plurality of clients wherein requests are satisfied so that a client belonging to a high quality-of-service class is given preferential access to data versions which require higher overheads to serve (e.g., higher quality content).

The Examiner cites column 69, lines 15-18; column 99, lines 52-61; and column 25, 3-21, in rejecting the steps of the independent claims; however, nowhere do these portions or any portions of Goodman teach or suggest the recited elements of the independent claims.

For instance, in rejecting the claimed step of providing a plurality of versions of data in which at least two versions have different overheads associated therewith, the Examiner cites column 69, lines 15-18:

. . . data management tools provide backup and restore facilities for data, and also provide configuration management for multiple versions of data, maintaining consistency among versions of test data.

However, Goodman clearly does not indicate that such multiple versions have different overheads associated with them.

In rejecting the claimed step of assigning individual clients to one of a plurality of quality-of-service classes, the Examiner cites column 99, lines 52-61:

The quality of service services 244 may also use data prioritization to improve network performance. While not an example of end-to-end QoS, various network components can be configured to prioritize their handling of specified types of traffic. For example, routers can be configured to handle legacy mainframe traffic (SNA) in front of other traffic (e.g., TCP/IP). A similar technique is the use of prioritized circuits within Frame Relay, in which the Frame Relay network vendor assigns different priorities to different permanent virtual circuits.

However, it is clear that Goodman only discloses prioritized handling of entire classes of traffic. Goodman does not disclose assigning individual clients to different quality of service classes. It can also be understood that Goodman does not disclose quality of service classes either.

Lastly, in rejecting the claimed step of satisfying requests so that a client belonging to a high quality-of-service class is given preferential access to data versions which require higher overheads to serve, the Examiner cites column 25, lines 3-21:

The CIP then plans and manages improvement related activities such as: define explicit criteria for assigning priority; consider raising the priority of low-priority opportunities that can be completed quickly; maintain a mix of high-priority and sure successes to ensure the continued momentum of the continuous improvement program; define the opportunity selection process; identify the resource allocation process; define the scheduling process; identify how the effort will be monitored; identify the procedure for communicating results to the organization; establish a continuous improvement organization to support the process; prioritize and classify opportunities; select projects; allocate resources and scheduling; monitor effort; and, support a standard process improvement process across the project. While maintaining quality at a program level, the quality management team 510 must liaise with each of the organizational units within the development architecture 500 in order to monitor the quality management processes within these units.

However, Applicants are completely unclear as to how this portion of Goodman (or any portion of Goodman) discloses that requests are satisfied so that a client belonging to a high quality-of-service class is given preferential access to data versions which require higher overheads to serve. This is because Goodman clearly does not teach or suggest such limitations.

Similar deficiencies are evident in the use of Goodman to reject the other independent claims. Also, Huff fails to remedy any of the deficiencies of Goodman.

Regarding the dependent claims of the present application, it is asserted that they are patentable over the cited references not only due to their dependence of respective ones of the above-mentioned independent claims, but also because such claims recite separately patentable subject matter.

Dependent claims 2 and 18 recite the overhead to serve a version is correlated with a quality of the version. For example, the high overhead version is typically of higher quality than the low overhead version (Specification, page 6, lines 7-8). Giving comprehensive training to help desk personnel in order to ensure the best possible level of service to the developers (Goodman, column 27, lines 14-16) does not teach or suggest correlating the overhead to serve a version with a quality of the version.

Dependent claims 3 and 19 recite the plurality of versions comprise images of different resolutions and clients belonging to a high quality-of-service class are given preferential access to higher resolution images. As noted above, Goodman at column 99, lines 52-61 refers to prioritized handling of entire classes of traffic, which does not teach or suggest giving clients belonging to a high quality-of-service class preferential access to higher resolution images.

Dependent claims 4 and 20 recite the quality of a version is correlated with a processing time required to create the version. Goodman, at column 26, lines 33-40 states specifications of service levels should be precise and the service must be measurable, which does not teach or suggest a correlation between the quality of a version and a processing time required to create the version.

Dependent claims 5 and 21 recite the overhead to serve a version is correlated with how current the version is. Although Goodman at column 22, lines 4-12 refers to completed documentation being broken down by versions, the relied-upon portion of Goodman does not teach or suggest the overhead to serve a version is correlated with how current the version is.

Dependent claims 6 and 22 recite in response to a system load exceeding a threshold, satisfying a higher percentage of requests from clients belonging to a lower quality-of-service class with a version requiring lower overhead to serve. Goodman at column 25, lines 3-21 considers raising the priority of low-priority opportunities that can be completed quickly. Assuming the low-priority opportunities that can be completed quickly are the recited clients belonging to a lower quality-of-service class with a version requiring lower overhead to serve, Goodman does not teach or suggest raising the priority of low-priority opportunities that can be completed quickly in response to a system load exceeding a threshold.

Regarding dependent claims 7 and 23, nowhere does FIG. 4 of Goodman disclose the server comprising multiple nodes and different nodes providing data versions requiring different overheads to serve.

With regard to claims 8-11 and 24-27, the Examiner refers to Goodman at column 79, lines 35-59 and column 98, lines 46-58 as teaching or suggesting the limitations of claims 8-11 and 24-27. Goodman at column 79, lines 35-59, refers to the preferred database replication/synchronization services supporting one or more of three ownership models and four basic types of replication styles.

Goodman at column 98, lines 46-58 refers to quality of service services 244, which are application designed to deliver a predetermined level of quality throughout the network for designated traffic by allocating dedicated bandwidth, prioritizing data traffic, and managing traffic flow. Although the relied-upon portions of Goodman refers to different types of network traffic (e.g., data, voice, video), having different quality of service requirements, Goodman does not teach or suggest a quality-of-service policy that specifies at least one of content quality and latency (as recited in claims 8 and 24), where one or more clients belonging to a premium service class are served with high content quality and low latency (as recited in claims 9 and 25), where one or more clients belonging to a medium service class are served with one of high content quality and low latency (as recited in claims 10 and 26), and wherein one or more clients belonging to a best-effort service class are served with unspecified content quality and latency (as recited in claims 10 and 26). Dependent claims 32 and 33 recite similar limitations and are believed allowable for at least the reasons noted above with regard to claims 8-11 and 24-27.

Claims 12 and 28 recite a client request is routed using at least one of an identity of the client, a quality of content, a load on at least one server, a data distribution on at least one server, and a capacity of at least one server. Although Goodman at column 108, lines 30-44 refers to data dependent routing, nowhere does the relied-upon portion of Goodman teach or suggest routing using at least one of an identity of the client, a quality of content, a load on at least one server, a data distribution on at least one server, and a capacity of at least one server.

With regard to claims 13, 14 and 16, the Examiner refers to Goodman at column 99, lines 52-61 and column 112, lines 25-36 as disclosing the limitations of claims 13 and 14, and column 25, lines 3-21 as disclosing the limitation of claim 16. Nowhere does the relied-upon portions of Goodman teach or suggest a client being assigned to a quality-of-service class by program logic that is externalized from the server (as recited in claim 13). Although column 112, lines 25-36 refers to business process rules, the relied-upon portion does not teach or suggest the business process rules can be modified by nonexperts in information technology (as recited in claim 14 and 16).

With regard to claim 15, Goodman at column 25, lines 3-21 states that while maintaining quality at a program level, the quality management team 510 must liaise with each of the

organizational units within the development architecture 500 in order to monitor the quality management processes within these units. Nowhere does Goodman state that the quality management team's program logic determined a policy utilized in the step of satisfying requests.

In view of the above, Applicants believe that claims 1-37 are in condition for allowance, and respectfully request withdrawal of the §102(e) and §103(a) rejections.

Respectfully submitted,

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